National Plant Data Center

Product Catalog

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http://plants.usda.gov

A Member of the National Science and Technology Consortium

PLANTS receives 7 million hits
and
serves 200,000+ extended user sessions a month

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National Plant Data Center

Mission

The National Plant Data Center (NPDC) provides leadership for the design, development, management, access, and marketing of agency plant information, particularly through the PLANTS Web site. It focuses resources on plant data definition, prioritization, collection, quality control, integration, dissemination, and interpretation for NRCS use in conservation practices and automated tools. It partners internationally to acquire plant data and new technologies and provides a national standard for basic plant data.

Vision

The NPDC is recognized as a national and global leader in the development of taxonomically-based databases and developing and disseminating plant information and technology to assist in the conservation of our natural resources.

National Plant Data Center
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NPDC Data Support Conservation Programs and Initiatives

The NPDC, in partnership with data contributors, supports the Natural Resources Conservation Service strategic plan and provides plant data and information for agricultural and conservation programs and initiatives:

National Buffer Initiative

Grazing Lands Conservation Initiative

Farm Bill

Wetland Conservation Initiative

Animal Feeding Operations (AFO)

Grazing Lands Application (GLA)

Field Offices Technical Guide (FOTG)

Conservation Planning, Effects, & Inventory

Nutrient Management & Environmental Compliance

Natural Resources Inventory (NRI)

National Soils Information System (NASIS)

Ecological Site Information System (ESIS)

Erosion Prediction Models (RUSLE, WEPP)

Ecological Restoration & Bioengineering

Plant Materials Information System

Wetland Identification & Delineation

Limited Resource Client Assistance

Invasive Species Management

How To Obtain Information

Plant information is available either directly through the PLANTS World Wide Web site on the Internet or through your local USDA Service Center or NRCS Field Office.

PLANTS Web Site

http://plants.usda.gov

The award winning PLANTS Web site contains general information on all 43,000 U.S. plant and lichen species, plus expanded information on over 2,000 conservation plants.

Plant Information Available

A few of the key areas of resource information that are needed to address natural resource conservation and the implementation of practices include plants, soils, and climate. The PLANTS Web site provides you with basic information on all plants in the U.S. and more detailed information on priority plants used in decision-making and practice application for the landowner.

All Plants

Plant Profile: Available for the 43,000 plants in PLANTS. Provides direct access to basic attribute data, such as, name, synonyms, distribution map (state level for all (including DC and PR/VI) and county level for forty-five of the states), family, growth habit, duration, Wetland Indicator Status, related Web sites, and U.S. nativity, plus images, if present. Also provides access to the Fact Sheet, Plant Guide, or Characteristics, if available for the plant. Thumbnail distribution maps are available at the genus level for all species within that genus.

Conservation Plants

Plant Guides: Two to eight page documents addressing the use, description, propagation, establishment, production, and availability of a species. The guide also contains references for further inquiry. PLANTS currently has 500 guides on-line. Format: pdf and doc.
Plant Fact Sheets: Brief one to two page documents informing the user about various species of conservation plants. Format: pdf or doc.
Plant Characteristics: About 100 plant characteristics have been compiled on 2,000 important conservation plants and are accessible by species/cultivar.

Culturally Significant Plants

Plant Guides: Detailed document addressing key plant species of importance to the Native American culture. Format: pdf or doc.

Invasive Plant Species

State Noxious Plant Checklists: State legal lists integrated into PLANTS with links to more information.
Invasive Plant Checklists: A list of plants from various published sources for species with known invasive characteristics. Includes links to additional sources of information.
Links to General Information: General links to Web sites pertaining to weed management and control.

Federal & State Threatened & Endangered

Lists of threatened and endangered plants are integrated into PLANTS. You are able to view lists relative to PLANTS currently accepted names and access further information both on and off site for the listed species.

Checklists

State Plant Checklists: Produce synonymized lists alphabetized by scientific or common name. The basic data are developed cooperatively by the Biota of North America Program.
Checklists by Family or Genus: Produce synonymized lists alphabetized by scientific or common name. The basic data are developed cooperatively by the Biota of North America Program.
Threatened & Endangered Plants: Provides lists of plants, integrated into PLANTS, that are derived from USFWS and State threatened and endangered plant data.
NWI Wetland Indicator Status Reports: Provides lists of plants, integrated into PLANTS, that are derived from the USFWS National List of Vascular Plant Species that Occur in Wetlands (1988).
Classification (Phylogenetic) Reports: The user can select a hierarchical report by selecting any level from genus to kingdom.

Images

Color Pictures: Visit the Photo Gallery to view thousands of images. If available, they will be present on the specific species Plant Profile. Different sizes are available.
Line Drawings: 4,500 line drawings from Britton & Brown (1915) will be on-line in 2003.

Links

Throughout the PLANTS Web site, links to further information are accessible. Dedicated links to several high quality sites can be found at the Plant Profile. General links are accessible through the Links area of the top frame on the Home Page. These include Fire Resistant Landscaping, Bioremediation, and Wetland Restoration. Species specific links are accessible at the bottom of each Plant Profile, particularly for key weeds and conservation species.

Classification Report

This report allows the user to easily search for closely related species. A hierarchical classification is displayed so that the user just clicks upon the level of their interest. This is accessible from the PLANTS Home Page or each species Plant Profile.

PLANTS Advanced Query

This enables users to search PLANTS using any plant attribute contained in the database, then display or download the information. This also enables the user to produce a list of key conservation plants meeting specific criteria.

Gateway to Other Modules

- **Alternative Crops**: A list of crops and links to cultivation and marketing information across the Web.

- **Distribution Update**: The NPDC, in cooperation with the USDA, Animal & Plant Health Inspection Service, Raleigh Plant Protection Center, developed a module within PLANTS that permits users to submit new state/county distribution records for consideration. The driving thrust of this effort is to provide a central clearinghouse for new weed distribution data so that we have a more complete national view.

- **Ecological Site Information System**: ESIS is the repository for the data associated with the collection of forestland and rangeland plot data and the development of ecological site descriptions.

- **Crop Nutrient Tool**: This tool provides estimates of nutrient (N, P, K) removal by crops. These estimates are used to calculate nutrient balance sheets, which are employed in the design of animal waste management systems. The crop nutrient uptake module automates and augments the information that is currently in Chapter 6 of the NRCS Agricultural Waste Management Field Handbook.

- **Plant Materials Information**: This provides access to plant materials information and technology, plus contact information for the Plant Materials Centers and Specialists located across the U.S. and its territories. Search indexed plant materials publications for information on planting, production, management, maintaining, and utilizing plant species for natural resource conservation, buffers, forage, wildlife habitat, restoration, erosion control, water quality, and nutrient management.

- **VegSpec**: Vegspec is a web-based decision support system that assists land managers in the planning and design of vegetative establishment practices.

Information Under Development

Pacific Basin Checklist

In association with the Smithsonian Institution-Department of Botany and the Bishop Museum, the NPDC will integrate a vascular plant checklist into PLANTS. Expected late 2003.

Web-Based Training

An unfunded, long-term project, the NPDC, Wetland Science Institute, NRCS Louisiana State Office, and other partners, are currently developing a pilot training module entitled "*Identification of Common Grass Genera of Louisiana*."

Plant Identification

Currently unfunded, this product will be a Windows-based tool that will assist field staff and the public in the identification of vascular plants. The actual tool is called a "polyclave or random-access key" and allows the user to tag characteristics of the plant they are holding in their hand. As additional characteristics (ex. woody, 3 meters high, alternate leaves, etc.) are clicked, the data set is reduced until the target plant is identified in fewer than ten clicks. Species descriptions, images, and help screens assist the user.

- **Identification of the Grasses and Grass-likes of Louisiana**: It is being developed in partnership with the NRCS Louisiana State Office and Northeast Louisiana University.
- **Wetland Plants of the Continental United States**: The beta version encompasses about 4,000 wetland plants. The foundation data were developed in partnership with the Biota of North America Program, Fish & Wildlife Service, NRCS Wetland Science Institute, Army Corps of Engineers, Environmental Protection Agency, Geological Survey Biological Resources Division, Northeast Louisiana University, and others.
- **Flora of the United States**: Long-term project.

Images

Additional images are being integrated. Users are invited to contribute slide sets to the NPDC for digitizing. More information on image contributions can be found on the PLANTS Home Page in the Green Bar by clicking on FAQs, then Intellectual Property.

PLANTS Redesign

The NPDC is currently redesigning the database underlying PLANTS to meet the needs of today and the future. Multiple common names and faster processing are a couple of the items being addressed.